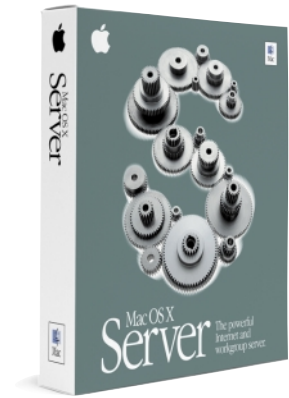# Mac OS X Server

The powerful Internet and workgroup server.

Key Features

Robust core operating system
- Kernel based on Mach 2.5 and BSD 4.4
- Protected memory
- Preemptive multitasking
- Native support for 100% Pure Java (JDK 1.1.6)

Affordable digital media server
- Streams QuickTime digital media
- Reflects live broadcasts
- Allows easy administration
- Supports more than 2,000 Internet users simultaneously

Industry-leading web server
- Standard implementation of Apache
- Optimized for fastest Apache performance
- Fully integrated single-button setup

Powerful application server
- WebObjects 4.0.1, the industry leader for developing and deploying flexible, scalable network applications
- 50-transaction-per-minute license
- Full suite of WebObjects development tools

Simple Macintosh workgroup management
- Includes Apple's new NetBoot technology for managing Macintosh systems on a network
- Makes managing a network of Macintosh computers as easy as managing a single Macintosh
- Gives users secure access to their personal desktops, files, and applications from any Macintosh on the network

Scalable file services
- Support for more than 4,000 open files per process and more than 1,000 simultaneous connections
- Support for importing user information from AppleShare IP servers
- Web-based Remote Administration tool for monitoring and changing server status, user and group lists, and mountable volumes

Mac OS X Server software combines outstanding performance and robustness, the renowned Macintosh ease of use, and innovative services for the Internet and workgroups—all for one great price. Mac OS X Server uses the same modern foundation that will power Mac OS X. Based on Mach 2.5 and BSD 4.4, this operating system is incredibly stable and scalable. It includes systemwide protected memory for crash-resistant computing, and full preemptive multitasking so that a single service can't monopolize the processor.

The QuickTime Streaming Server lets you easily and affordably stream your own QuickTime digital media on the Internet. Using industry-standard real-time protocols (RTP and RTSP) and cutting-edge compression technologies, you can serve more than two thousand users on the Internet or deliver near-broadcast-quality video on your local network. And the QuickTime Streaming Server can reflect an encoded audio or video stream in real time, so you can broadcast live events as they happen.

Two industry-leading Internet services—Apache and WebObjects developer tools—are included with Mac OS X Server. Apache is the world's most popular server for reliably delivering both static and dynamically generated HTML pages. Apache can be scaled from a workgroup web server to a complex Internet site hosting multiple domains. Apple's standard implementation of Apache is fully integrated with Mac OS X Server, and the server software itself has been optimized to work with Apache.

WebObjects software is the most flexible and scalable way to develop and deploy network applications for viewing from any web browser. It's a proven, industry-leading technology that currently runs thousands of mission-critical applications around the world. Included with Mac OS X Server are the WebObjects developer tools, which let you create your own WebObjects applications.

In addition to providing powerful Internet services, Mac OS X Server introduces a whole new way to manage your Macintosh workgroups. Apple's exciting NetBoot software enables a network of Macintosh computers to run from the same shared System Folder and applications volume stored on the NetBoot server. Just update the NetBoot server, and all the other computers have instant access to the new configuration.

Mac OS X Server also includes highly scalable file services capable of supporting thousands of open files, connecting to more than a thousand concurrent users, and pushing hundreds of megabits per second across the network.
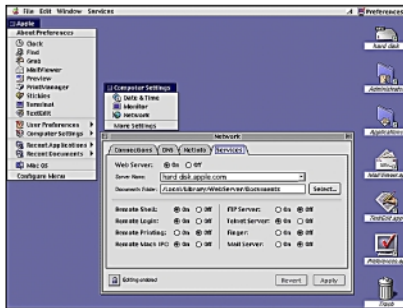
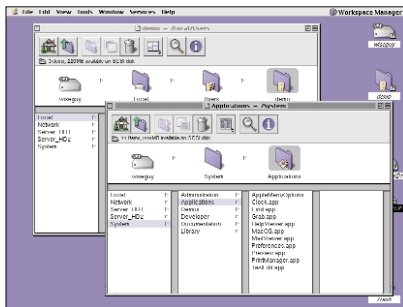Mac OS X Server: Powerful software for Internet services and Macintosh workgroups.

Configuring network services is easy with the Network control panel. You can enable or disable any service without ever having to touch a configuration file.

The Columns view of the Workspace Manager makes it easy for system administrators and web developers to navigate large, complex file systems.

Features

Benefits

Robust core operating system

Features	Benefits
Kernel based on Mach 2.5 and BSD 4.4	Provides an incredibly stable and scalable operating system based on open standards
	Makes it easy to port applications from UNIX operating systems
Protected memory	Helps prevent system crashes
Preemptive multitasking	Prevents a single service from monopolizing the computer
Native support for 100% Pure Java (JDK 1.1.6)	Runs any of the multitude of conformant Pure Java applications and applets
	Integrates the Java runtime code with the native object model and threads for impressive performance and stability

Affordable digital media server

Features	Benefits
Streams QuickTime digital media	Streams QuickTime, the industry-leading digital format
	Supports any QuickTime 4 compression format
Reflection of live broadcasts	Supports reflection of live encoded audio or video so you can broadcast events as they happen
Ability to broadcast to the Internet and your intranet	Can serve live broadcasts or hundreds of concurrent, unique stored files to more than 2,000 users on the Internet
	Lets you deliver full-screen, near-broadcast-quality video on your local network
Easy administration	Includes tools for controlling server settings and viewing time-based server activity

Industry-leading web server

Features	Benefits
Certified implementation of Apache	Brings the world's most popular web server to the Macintosh platform
	Allows you to easily share Apache configuration files with or migrate them from other platforms
	Supports easy updating to future releases from the Apache Group
Optimized for Apache performance	Delivers performance outstripping any other web server in its class
Single-button setup	Gets your web server up and running in minutes

The Macintosh Management server provides a multiuser environment on top of the Mac OS, allowing users to securely access their personal desktops, files, and applications from any Macintosh computer on the network.

Features   Benefits

Powerful application server

Features	Benefits
WebObjects 4.0.1 software	Provides the most flexible and scalable server for deploying network applications that can connect to multiple databases and generate HTML and Java user interfaces for a standard web browser
	Provides proven technology that has made WebObjects the most popular application server for the Internet and intranets, running some of the web's most popular sites
	Lets you leverage hundreds of existing third-party WebObjects solutions previously developed for use on UNIX or Windows NT systems
50-transaction-per-minute license	Allows you to evaluate WebObjects applications or deploy them in medium-size workgroups
Full suite of WebObjects development tools	Enables you to create your own WebObjects applications
	Enables you to assemble prebuilt components to create powerful reporting and electronic-commerce solutions
	Includes the WebObjects Direct to Web feature to quickly enable access to SQL databases in a web page

Simple Macintosh workgroup management

Features	Benefits
Apple's new NetBoot technology	Enables you to configure and update systems on all your NetBoot-capable Macintosh computers by simply updating the NetBoot server once
	Stores a single, consistent System Folder and application folders for all clients on a NetBoot server
	Includes NetBoot Desktop Admin software that lets you administer the system and application resources used by NetBoot client computers from any NetBoot client
Macintosh Management server software	Enables individual users to securely access their system, applications, and documents from any NetBoot or non-NetBoot client
	Lets you control access to your network by providing authentication services and system policy control

Scalable file services

Features	Benefits
File services comparable to those in AppleShare IP	Lets any AppleShare client access files over either TCP/IP or AppleTalk
Support for more than 4,000 open files per process and 1,000 simultaneous connections	Enables you to provide file services to a large workgroup from a single Macintosh server
Support for adding multiple users at one time from AppleShare IP servers	Speeds server configuration
	Makes it easy to add a Mac OS X Server–based system to an existing AppleShare network
Ability to export the Apache documents directory to AppleShare clients	Allows you to drag and drop files onto the Apache server from any Macintosh client
Web-based Remote Administration tool	Provides easy-to-use file server management that you can access from any Java-capable web browser

Top Five Reasons to Get Mac OS X Server

1. Deliver QuickTime digital media
2. Provide native Apache web services on the Macintosh platform
3. Develop and deploy cutting-edge network applications with WebObjects
4. Manage your network with NetBoot server software
5. Scale your Apple file services to more than 1,000 users

Choosing between AppleShare IP and Mac OS X Server

AppleShare IP software provides file, print, web, and mail services for Macintosh and Windows clients. Setup and management are done through an integrated and secure interface that makes AppleShare servers extremely easy to use.

Mac OS X Server does not provide all the same services as AppleShare IP, but does offer high scalability for web serving and file sharing. It does not directly support Windows clients for file sharing, although any web client can access its web services.

If you need any of the following capabilities, you should choose Mac OS X Server:
• Have a high-speed Apache web server
• Implement a WebObjects application server
• Deliver stored or live digital video
• Configure and update multiple Macintosh systems from a single server
• Support more than 1,000 simultaneous Macintosh clients for file sharing

If, however, you need a general-purpose server that can support a mixed environment of Macintosh and Windows clients, you should choose AppleShare IP.

For More Information

For more information about Mac OS X Server, visit www.apple.com/macosx/server. For more information about AppleShare IP, visit www.apple.com/appleshareip. To find the latest information on hardware and software products for your Macintosh, visit the Macintosh Products Guide at www.apple.com/guide.

To purchase this product from the Apple Store, go to www.apple.com/store or call 800-MY-APPLE. To find an authorized Apple reseller in your area, call 800-538-9696.

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Ordering Information

Mac OS X Server
Order No. M7733Z/A

Mac OS X Server Upgrade
Order No. M7732Z/A

Includes four CDs containing the following software:
• Base Mac OS X Server system
— Mac OS X core operating system
— Apache web server
— QuickTime Streaming Server 1.0.2
— Apple file services
— Java 1.1.6
— Perl 5.0
— Sendmail 8.9
— FTP
— Telnet
— NFS
— Mac OS 8.6 compatibility environment
• WebObjects 4.0.1 development and deployment software
• NetBoot server software
— Mac OS 9 client images for NetBoot client computers
— NetBoot Desktop Admin
— Macintosh Management client for non-NetBoot computers
• Network Assistant 4

System Requirements

Mac OS X Server
• Power Macintosh G3, Power Mac G4, Macintosh Server G3, or Macintosh Server G4 (does not support iMac, Macintosh PowerBook G3, or any earlier systems)
• 64MB of RAM
• 1GB hard disk
• Video card, Ethernet card, or disk controller available from Apple

NetBoot client computers
• An iMac, an iBook, a Power Mac G4, a 1999-model Power Mac G3, or a Macintosh PowerBook G3 computer introduced in May 1999 or later
• 32MB of RAM

Macintosh Management client computers
• 68040 or PowerPC processor–based Macintosh computer
• Mac OS 8.1 or later
• 32MB of RAM

Important: Mac OS X Server uses a different file system, called Mac OS X Server Format, which supports POSIX file system semantics. This requires you to partition or reinitialize your existing Macintosh hard disk drives. Files that are shared with AppleShare or NetBoot clients must be stored on Mac OS Extended Format (HFS Plus) volumes.

Support Options

Apple is dedicated to providing support that meets the needs of our customers. Fee-based support for Mac OS X Server is offered on a per-incident basis or through an annual agreement. To purchase one of Apple's support products in the United States or Canada, please call 888-275-8258. Technical and administrative support is provided in English. For more information, visit www.apple.com/support.